

In re Application of
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B. In the Claims

Please cancel claims 39 to 46, 48 to 51, 54 to 56, 64 to 66, 68, 69, 74, 75, and 77 to 80 without prejudice, and amend the claims as set forth below. Pursuant to the present amendment, the status of the claims will be as follows:

39 to 46. Cancelled

47. (Currently amended) The method of claim 39 71, wherein amplified ORFs of the plurality encode full length proteins.

48 to 56. Cancelled

57. (Currently amended) The method of claim 39 71, wherein the DNA molecules comprise prokaryotic DNA or eukaryotic DNA.

58. Cancelled

59. (Currently amended) The method of claim 39 71, wherein the amplified ORFs of the plurality encode members of a family of proteins.

60. (Previously added) The method of claim 59, wherein the members of the family of proteins are human proteins.

61. (Previously added) The method of claim 59, wherein the members of the family of proteins comprises members of a family of kinases, phosphatases, transcription factors, oncogenes, or tumor suppressors.

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62. (Currently amended) The method of claim 39 71, which is performed in a high throughput format.

63. (Currently amended) The method of claim 39 71, which is performed in a multiwell microtiter plate.

64 to 70. Cancelled

71. (Currently amended) A method for producing a library of selected expressible open reading frames (ORFs), the method comprising:

a) amplifying deoxyribonucleic acid (DNA) molecules comprising a plurality of ORFs using a primer pair, wherein the primer pair comprises a 5' primer, which comprises a nucleotide sequences starting 5'-CACCATG, and a 3' primer, which causes the amplification product to end just prior to a stop codon, thereby producing a plurality of amplified ORFs;

b) purifying amplified ORFs of the plurality, thereby obtaining purified amplified ORFs;

c) inserting the purified amplified ORFs into expression vectors using an enzyme selected from the group consisting of a vaccinia DNA topoisomerase, a lambda integrase, an FLP recombinase, and a P1-Cre protein, thereby producing expression vectors comprising the amplified ORFs;

d) transforming cells with the expression vectors comprising the amplified ORFs; and

e) selecting transformed cells containing expression vectors comprising ORFs in an orientation for expression of a polypeptide encoded by the ORF.


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~~72.~~ (Previously added) The method of claim ~~71~~¹, wherein purifying the amplified ORFs comprises separating the amplified ORFs using agarose gel electrophoresis, and isolating the amplified ORFs from the agarose gel.

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~~73.~~ (Previously added) The method of claim ~~72~~², wherein the agarose is low melt agarose.

~~74 and 75. Cancelled~~

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~~76.~~ (Currently amended) The method of claim ~~74~~¹, wherein the expression vectors are suitable for prokaryotic expression and eukaryotic expression.

~~77 to 80. Cancelled.~~